CLAIMS:

What is claimed is:

1. A heat sink clip for use in attaching a heat sink to a mounting structure, the mounting structure including at least first and second posts, the heat sink clip comprising:

a body having an outer panel, an inner panel, a bearing surface on at least one of the outer and inner panels, a first engagement portion, and a second engagement portion;

a lever pivotally attached to the heat sink;

a pin attached to the lever and in communication with the bearing surface of the body; and

wherein when the lever is pivoted from an open position to a closed position, the pin contacts the bearing surface of the body, the first engagement portion engages the first post of the mounting structure and the second engagement portion engages the second post of the mounting structure.

2. A heat sink clip as defined in claim 1,wherein the body includes a bearing surface on the outer panel of the body and a bearing surface on the inner panel of the body.

3. A heat sink clip as defined in claim 1, wherein the bearing surface of the body is an inverted, generally V-shaped slot.

4. A heat sink clip as defined in claim 3, wherein the inverted, generally V-shaped slot includes a first segment, a peak segment, and a second segment, wherein the first segment is upwardly sloped, the second segment is downwardly sloped and the peak segment is provided between the first segment and the second segment.

5. A heat sink clip as defined in claim 4, wherein a magnitude of the slope of the first segment is greater than a magnitude of the slope of the second segment.

6 A heat sink clip as defined in claim 4 wherein the first segment of the inverted, generally V-shaped slot is shorter than the second segment of the inverted, generally V-shaped slot.

7. A heat sink clip as defined in claim 4, wherein the inverted generally V-shaped slot further includes an end segment, wherein the end segment is provided at an end of the second segment opposite the peak segment, and wherein the end segment is angled relative to the second segment.

8. A heat sink clip as defined in claim 1, wherein the first engagement portion includes a fixed end and a free end, the free end of the first engagement portion engaging with the first post.

9. A heat sink clip as defined in claim 8, wherein the free end is hook-shaped.

10. A heat sink clip as defined in claim 1, wherein an upper edge of the outer and inner panels of the body form the second engagement portion.

11. A heat sink clip as defined in claim 1, the heat sink including motion control apertures therethrough, wherein the body further includes guide pins extending from the inner panel for engagement with the motion control apertures.

12. A heat sink clip as defined in claim 1, wherein the lever further includes an outer panel with a mounting aperture therethrough, an inner panel with a mounting aperture therethrough, wherein the mounting aperture through the outer panel is aligned with the mounting aperture through the inner panel and the mounting aperture through the outer panel is larger than the mounting aperture through the inner panel, and wherein a fastener is passed through the mounting apertures to secure the heat sink clip to the heat sink and the head of the fastener passes through the mounting aperture of the outer panel.

13. A heat sink clip as defined in claim 1, wherein the lever further includes a thumb latch.

14. A heat sink clip as defined in claim 1, wherein the bearing surface of the body is an inverted, generally V-shaped slot including an upwardly sloped first segment, a downwardly sloped second segment and a peak segment between the first segment and the second segment, wherein when the lever is in the open position the pin is positioned near a

lower end of the first segment and when the lever is in the closed position the pin is positioned near the lower end of the second segment.

15. A heat sink clip as defined in claim 14, wherein the inverted, generally V-shaped slot further includes an end segment at the end of the second segment opposite the peak segment and when the lever is in the closed position the pin contacts the end segment of the inverted generally V-shaped slot.

16. A heat sink clip as defined in claim 11, wherein the motion control apertures limit movement of the heat sink clip to horizontal movement only.

17. A heat sink clip as defined in claim 11, wherein the motion control apertures limit movement of the heat sink clip to vertical movement only.

18. A heat sink clip as defined in claim 11, wherein the motion control apertures allows movement of the heat sink clip in both the vertical and horizontal direction.

19. A heat sink clip as defined in claim 1, wherein a heat sink cover is placed in direct communication with the heat sink, and the lever is attached to the heat sink cover.

20. A heat sink clip as defined in claim 19, wherein the heat sink cover includes motion control apertures.

21. A heat sink cover and at least one heat sink clip, in combination:

the heat sink cover comprising a left panel and a right panel;

the heat sink clip comprising a body having an outer panel, an inner panel, a bearing surface on at least one of the outer and inner panels, a first engagement portion, a second engagement portion, a lever pivotally attached to the left or right panel of the heat sink cover, a pin attached to the lever and in communication with the bearing surface of the body; and

wherein when the lever is pivoted from an open position to a closed position, the pin moves along the bearing surface of the body.

22. The heat sink cover and heat sink clip combination of claim 21, wherein the heat sink cover further includes motion control apertures through the left or right panel and

the body of the heat sink clip further includes guide pins extending from the inner panel of the body, and wherein as the lever is moved from the open position to the closed position the guide pins move within the motion control apertures.

23. The heat sink cover and heat sink clip combination of the claim 22, wherein the motion control apertures of the heat sink cover are generally L-shaped.

24. A mounting structure, a heat sink cover, and at least one heat sink clip in combination:

the mounting structure comprising a base including at least first and second posts extending upwardly therefrom;

a cover comprising left and right panels;

the heat sink clip comprising a body having an outer panel, an inner panel, a bearing surface on at least one of the outer and inner panels, a first engagement portion, a second engagement portion, a lever pivotally attached to the left or right panel of the heat sink cover, a pin attached to the lever and in communication with the bearing surface of the body; and

wherein when the lever is pivoted from an open position to a closed position, the pin moves along the bearing surface of the body, the first engagement portion engages the first post of the mounting structure and the second engagement portion engages the second post of the mounting structure.

25. The combination as defined in claim 24, wherein the first engagement portion includes an inner surface and an outer surface, wherein the first post of the mounting structure includes an inner surface and an outer surface, and wherein the heat sink clip is aligned with the mounting structure such that the inner surface of the first engagement portion is positioned proximate the outer surface of the first post of the mounting structure.

26. The combination as defined in claim 24, wherein the first engagement portion includes a fixed end and a hook-shaped free end.

27. A method of attaching a heat sink assembly having a heat sink cover to a mounting structure comprising the steps of:

providing a mounting structure have a base and at least first and second posts extending upwardly therefrom;

providing a heat sink cover comprising left and right panels;

providing a body of a heat sink clip having an outer panel, an inner panel a bearing surface on at least one of the outer and inner panels, a first engagement portion, and a second engagement portion;

providing a lever;

providing a pin;

mounting the lever within the body;

and pivotally attaching the lever to the cover;

aligning the cover and heat sink clip with the mounting structure such that the left or right panel of the cover is positioned between the first and second posts of the mounting structure and the first engagement portion of the body extends proximate the outer surface of the first post of the mounting structure;

pivoting the lever from an open position to a closed position so as to move the pin along the bearing surface.

28. The method of claim 27, wherein the bearing surface of the body of the heat sink clip is an inverted, generally V-shaped slot, the body further includes retaining pins extend from the inner panel, and the cover further includes motion control apertures through the left and right panels, and wherein the step of pivoting the lever causes the clip to move the transversely and vertically relative to the mounting structure.

29. The method of claim 27, wherein the heat sink clip is formed from plastic and the pin is integrally formed with the lever and the step of attaching the lever to the body includes snap fitting the pin within the body.

30. The method of claim 27, wherein the heat sink clip is formed from metal, the lever further includes pin apertures, and the step of mounting the lever within the body includes placing the lever between the outer and inner panels of the body, aligning the bearing surface with the pin apertures and passing the pin through the pin apertures.

31. The method of claim 27, wherein the lever of the heat sink clip further includes mounting apertures and the step of pivotally attaching the lever to the heat sink cover further includes the step of passing a fastener through the mounting apertures prior to attaching the lever to the cover.